SIEMENS MXL VDT Interface Module Circuit Board Instruction Manual

SIEMENS

Fire Safety
CERBERUS PYROTRONICSTM MODEL VDT
Interface for the CERBERUS PYROTRONICSTM MXL

Contents

INTRODUCTION

The CERBERUS PYROTRONICS™ Model VDT Interface for the MXL provides both an alternate way of displaying printer data (in place of the TSP-40) and an additional way to control the MXL through use of the keyboard option. By using the VDT types listed below, the operator can perform commands such as acknowledging events, silencing/unsilencing audibles, resetting the system, viewing system lists, changing detector sensitivities, controlling outputs, etc., from the VDT keyboard. The VDT Interface is available with MXL firmware revisions 2.12 and higher.

OPERATION

Once the MXL system is powered up, the VDT displays system information in the same way that a printer does. To access any type of input to the VDT, begin typing the command. MXL finishes the information it is printing first, and then it presents the command prompt, as shown below:
MXL command: (text typed) Type one of the available commands using the format listed. MXL processes the command in the same way it processes a command executed
from the MXL Menu at the MKB keyboard. If there are items waiting for printing, they take precedence over any

List commands. To use Control functions from the VDT, enter the level 1 or 2 password from the CSG-M at the keyboard. Before entering any Control function command, type LON (the log-on commana) at the keyboard, followed by the appropriate password. If a Control command is entered before logging on, MXL indicates that the log-on is required.
NOTE: Commands are NOT case sensitive.

CSG-M Requirements
NOTE: CSG-M does not allow this option to be unsupervised in an NFPA 72 Proprietary system.
To use the VDT interface, set the printer option in the CSG-M Network Map, MKB subaddress, to one of the following (depending on the hardware available):
TI820KSR (supervised)
MXL-VDT 80 (supervised)
MXL-VDT 132 (supervised)
VDT 80 (unsupervised)
VDT 132 (unsupervised)
Keyboard control of the VDT is NOT available if one of the following is selected:
TI820KSRO
TSP-40 Strip printer
DEC LA50
Generic 80
Generic 132

Acknowledgment and Audible Commands
The Acknowledgment and Audible commands entered at the keyboard operate in the same way as they do when entered from the MKB. To execute any of the following commands, a password log-on is required (See LON command, page 5). Type the desired command at the prompt, followed by ENTER.
NOTE: The XL3 commands given in parentheses are honored for users accustomed to XL3 commands.

AAL – Acknowledge Alarm (AA)
ASP – Acknowledge Supervisory
ATR – Acknowledge Trouble (AT)
ASC – Acknowledge Security
When Block Acknowledge is selected in the CSG-M, it acknowledges all existing unacknowledged events for that event queue. Note that the acknowledgment is printed on the VDT, as it would be on the printer.
NOTE: The CSG-M does not allow block acknowledge for an NFPA 72 Proprietary system.

When Individual Acknowledge is selected in
the CSG-M, it acknowledges the most recent unacknowledged event in that event queue. Note that the acknowledgment is printed on the VDT as it would be on the printer.
SUA – Silence/Unsilence Audibles
The SUA command toggles the state of the system's silenceable audibles.
CRS – Reset the MXL (CR)
When all events are acknowledged, all audibles are silenced, all queue information is printed, and the Control Reset command is issued, the MXL resets just as if it had been reset from the MKB. (Note that the XL3 command CR is honored for users accustomed to XL3 commands.)

Entering the LIST Commands from the VDT
The List commands give an identical output to the printouts obtained from the MXL menu using the PRINT key. Those commands are listed and described below.
Note that some of the commands include the notations m, m-d, etc. Replace these notations with the information given in the command description. When entering module or device number information, leading zeros are NOT required. Separate the data fields (i.e., module, device, arm, etc.) with either a space, a hyphen, or a comma.

LST – List Status (LS)
Use the LST command for a listing of the current MXL status. At the command prompt, type LST followed by ENTER. A time and date stamped status summary prints a listing similar to the following:

System Status at 12:12:12 Dec 12, 2012 :
0 ALARM OQ ALARM ACK
OQ SUPERU OQ SUPERU ACK
0 TROUBLE 0 TROUBLE ACK
Q SECURTY 0 SECURTY ACK

(Note that the XL3 command LS is honored for users accustomed to XL3 commands.)

LAL – List Alarms (LA)
Use the LAL command for a listing of current alarms. At the command prompt, type LAL followed by ENTER. The events in the alarm queue are displayed on the VDT in the same format as the list alarms print item in the MXL menu (See List Alarm in the MXL/MXLV Manual, P/N 315-092036).
(Note that the XL3 command LA is honored for users accustomed to XL3 commands.)

LSP – List Supervisory
Use the LSP command for a listing of current supervisory events. At the command prompt, type LSP followed by ENTER. The events in the supervisory queue display on the VDT in the same format as the List Supervisory print item in the MXL menu (See List Supervisory in the MXL/ MXLV Manual, P/N 315-092036).
LTR – List Trouble (LT)
Use the LTR command for a listing of current troubles. At the command prompt, type LTR followed by ENTER. The events in the trouble queue display on the VDT in the same format as the List Trouble print item in the MXL menu (See List Trouble in the MXL/MXLV Manual, P/N 315- 092036).
(Note that the XL3 command LT is honored for users accustomed to XL3 commands.)
LSC – List Security
Use the LSC command for a listing of current security events. At the command prompt, type LSC followed by ENTER. The events in the security queue display on the VDT in the same format as the List Security print item in the MXL menu (See List Security in the MXL/MXLV Manual, P/N 315-092036).
LSS m – List Sensitivity Settings
Use the LSS command for a listing of sensitivities. At the command prompt, type LSS, space, and the module number of the loop for which the list is needed. Press ENTER. The sensitivity settings for the individual smoke detectors on the selected analog loop (m) are displayed on the VDT. They appear in the same format as they appear in the List Sensitivity Settings print item in the MXL menu (See List Sensitivity Settings in the MXL/MXLV Manual, P/N 315-092036).
LAV m – List Analog (analog2) Voltage (LDO)
Use the LAV command for a listing of analog voltages. At the command prompt, type LAV, space, and the module number of the loop for which the list is needed. Press ENTER. The analog2 voltages for the individual smoke detectors on the selected analog loop (m) are displayed on the VDT in the same format as they appear in the corresponding print item in the MXL menu (See List Voltages in the MXL/MXLV Manual, P/N 315-092036).
LTV m – List Threshold Voltage
Use the LTV command for a listing of threshold voltages. At the command prompt, type LTV, space, and the module number of the loop for which the list is needed. Press ENTER. The threshold voltages for the individual devices on the selected analog loop (m) are displayed on the VDT in the same format as they are in the corresponding print item in the MXL menu (See List Voltages in the MXL/MXLV Manual, P/N 315- 092036).
LSV m – List Sensitivity Voltages (LF)
Use the LSV command for a listing of sensitivity voltages. At the command prompt, type LSV, space, and the module number of the loop for which the list is needed. The sensitivity voltages for the individual devices on the selected analog loop (m) are displayed on the VDT in the same format as they are in the corresponding print item in the MXL menu (See List Voltages in the MXL/MXLV Manual, P/N 315-092036). [Note that the XL3 command LF m (where m is the network ALD-2 loop for which the voltage listing is needed) is honored for users accustomed to XL3 commands.]
LMT – List Module Type
Use the LMT command for a listing of module types in the system. At the command prompt, type LMT, then press ENTER. The types for all modules in CSG-M are displayed on the VDT in the same format as they are in the List Module print item in the MXL menu (See List Module in the MXL/MXLV Manual, P/N 315092036).
LDT m- List Device Type
Use the LDT command for a listing of device types. At the command prompt, type LDT, space, and the module number of the loop for which the list is needed. Press ENTER. The types for the individual devices on the selected analog loop (m), aS programmed in CSG-M, are displayed on the VDT in the same format as they are in the

List Device print item in the MXL menu (See List Device in the MXL/MXLV Manual, P/N 315- 092036).

LMS m – List Messages (LM)

Use the LMS command for a listing of device messages. At the command prompt, type LMS, space, and the module number of the loop for which the list is needed. Press ENTER. The custom messages for each device on the selected analog loop (m) are displayed on the VDT in the same format as they are in the List Message print item in the MXL menu (See List Message in the MXL/MXLV Manual, P/N 315- 092036).

[Note that the XL3 command LM m (where m is the network ALD-2 loop for which the listing is needed) is honored for users accustomed to XL3 commands.]

LSW – List Software Versions

Use the LSW command for a listing of MXL software version information. At the command prompt, type LSW and press ENTER. A time and date stamped report containing the system custom message, MXL and CSG-M version, CSG-M source date, and the CSG-M load time and date displays on the VDT in the same format as in the List Software Version print item of the MXL menu (See List Software Version in the MXL/MXLV Manual, P/N 315-092036).

LCV m – List XLD-1 Calibration Voltage

Use the LCV command for a listing of XLD-1 calibration voltages. At the command prompt, type LCV, space, and the module number of the loop for which the list is needed. Press ENTER. The calibration voltages for the individual devices on the selected XLD-1 analog loop (m) are displayed on the VDT in the same format as they appear in the corresponding print item in the MXL menu (See List XLD-1 Calibration Voltage in the MXL/MXLV Manual, P/N 315-092036).

LIV m – List XLD-1 ID Voltage

Use the LIV command for a listing of XLD-1 ID voltages. At the command prompt, type LIV, space, and the module number of the loop for which the list is needed. Press ENTER. The ID voltages for the individual devices on the selected XLD-1 analog loop (m) are displayed on the VDT in the same format as they appear in the corresponding print item in the MXL menu (See List XLD-1 ID Voltage in the MXL/MXLV Manual, P/N 315-092036).

L2V m – List XLD-1 2nd ID Voltage

Use the L2V command for a listing of XLD-1 2nd ID voltages. At the command prompt, type L2V, space, and the module number of the loop for which the list is needed. Press ENTER. The 2nd ID voltages for the individual devices on the selected XLD-1 analog loop (m) are displayed onthe VDT in the same format as they appear in the corresponding print item in the MXL menu (See List XLD-1 2nd ID Voltage in the MXL/ MXLV Manual, P/N 315-092036).

LKP m – List Air Sampling Smoke Percent

Use the LKP command for a listing of Air Sampling smoke percent of scale values. At the command prompt type LKP, space, and the NIM-1 (ASP) module number for which the list is needed. Press ENTER. The Air Sampling smoke percents for the selected module (m) are displayed on the VDT in the same format as they appear in the corresponding print item in the MXL menu.

LAP m – List Air Sampling Airflow Percent

Use the LAP command for a listing of Air Sampling airflow percent of scale values. At the command prompt type LAP, space, and the NIM-1 (ASP) module number for which the list is needed.

Press ENTER. The Air Sampling airflow percents for the selected module (m) are displayed on the VDT in the same format as they appear in the corresponding print item in the MXL menu.

LAT m – List Air Sampling Alarm Trip Points

Use the LAT command for a listing of Air Sampling alarm trip point values. At the command prompt type LAT, space, and the NIM-1 (ASP) module number for which the list is needed. Press ENTER. The Air Sampling alarm trip points for the selected module (m) are displayed on the VDT in the same format as they appear in the corresponding print item in the MXL menu.

LFT m – List Air Sampling Airflow Trip Points

Use the LFT command for a listing of Air Sampling airflow trip point values. At the command prompt type LFT, space, and the NIM-1 (ASP) module number for which the list is needed. Press ENTER. The Air Sampling airflow trip points for the selected module (m) are displayed on the VDT in the same format as they appear in the corresponding print item in the MXL menu.

LPS m – List Percent/Ft Sensitivity

Use the LPS command for a listing of percent/ft sensitivity. At the command prompt type LPS, space, and the module number of the loop for which the list is needed. Press ENTER. The percent/ft sensitivity for the individual devices on the selected loop (m) are displayed on the VDT in the same format as they appear in the corresponding print item in the MXL menu.

LPP m – List Percent/Ft Pre-Alarm

Use the LPP command for a listing of percent/ft pre-alarm values. At the command prompt type LPP, space, and the module number of the loop for which the list is needed. Press ENTER. The percent/ft pre-alarm values for the

selected loop (m) are displayed on the VDT in the same format as they appear in the corresponding print item in the MXL menu.

LPA m – List Percent/Ft Analog

Use the LPA command for a listing of percent/ft analog values. At the command prompt type LPA, space, and the module number of the loop for which the list is needed. Press ENTER. The percent/ft analog values for the selected loop (m) are displayed on the VDT in the same format as they appear in the corresponding print item in the MXL menu.

LAS m – List ASD Applications

Use the LAS command for a listing of ASD applications of a particular module. At the command prompt type LAS, space, and the module number for which the list is needed. Press ENTER. The ASD applications of the selected module (m) are displayed on the VDT in the same format as they appear in the corresponding print item in the MXL menu.

LOD – List Disarmed Output State

Use the LOD command to list the output points that are disarmed in the system together with their states, NORMAL or OFF-NORMAL. At the command prompt type LOD, space and the module number. Press ENTER. The system displays the disarmed output devices in that module.

LID – List Disarmed Input State

Similar to the LOD command, the LID command displays the disarmed input points in the module. Use the LID command to list the input points that are disarmed in the system together with their states, NORMAL or OFF-NORMAL. At the command prompt type LID, space and the module number. Press ENTER. The system displays the disarmed output devices in the same format as that of the LOD command.

For example:

Enter MXL command: LID 15

Listing of Disarmed Input Points for Module 1 CALD):

1-ILP-2 Photo Detector: NORMAL

15-TRI-2/ 60D Dual Switch: OFF-NORMAL

If there are no disarmed input points in that module, the system will respond as follows:

Listing of Disarmed Input Points for Module 15 CCRM4):

NO ENTRIES: Only default values found

LCM – List Modules in Commissioning Mode

Use the LCM command to list the module(s) in the system that are currently in summarized (commissioning) mode. At the command prompt type LCM. Press ENTER. The system lists the modules in commissioning mode as shown in the following example:

Listing of Modules in Commissioning Mode:

1-ALD: ON 2-ALD: ON 3-FS Interface (NIM): ON 4-CRM4: ON

If there are no modules in commissioning mode, the following message is displayed on the VDT: Listing of Modules in Commissioning Mode:

NO ENTRIES: only default values found

Entering the CONTROL Commands from the VDT

LON xxxx – Log On (Enter password)

Enter a CSG-M level 1 or level 2 password from the keyboard to access acknowledge, audible silence/ unsilence, reset, and control functions from the VDT. Type LON, space, and the password. Press ENTER. This password remains in effect as long as there is keyboard activity from the VDT keyboard for password protected commands. However, if there are 5 minutes of inactivity at the VDT keyboard, the current password log-on is canceled. The password time-out time is CSG-M programmable starting
with revision 7.01.

LOF – Log OFF (Cancel current password level) Use the LOF command to cancel the current password log-on. This prevents any further control function for the VDT keyboard until the next log-on. Type LOF and press ENTER from the VDT keyboard to execute this command. CSS m-d x – Change Sensitivity (CS)

Use the CSS command to change the sensitivity setting of a detector from the VDT. At the command prompt, type CSS, space, the moduledevice number, and the letter that represents the desired sensitivity setting of the smoke detector. Press ENTER.

The lower case letters represent the following:

m_ The ALD-2I loop network address of the smoke detector whose sensitivity is to be changed.

d The loop subaddress of the smoke detector whose sensitivity is to be changed.

x The desired sensitivity setting for the smoke detector.

MXL software revisions before 3.00:

L – Low (0)
N – Normal (1)
M – Medium (2)
H – High (3)

MXL software revisions 3.00 and higher:

Low3 (0)
Low2 (1)
Lowl (2)
Normal (3) or Norn
Hi_1 (4)
Hi_2 (5)
Hi_3 (6)

The ranges of XLD-1 sensitivity for MXL Software revisions 6.04 and higher are:
Low1 (2)
Normal (3) or Norn
Hi_1 (4)
Hi_2 (5)

If a sensitivity setting for XLD-1 is entered outside of the XLD-1 range, yet within the ALD-2I sensitivity range, the error message Device ID mismatch will appear.
[Note that the XL3 command CS m-d x (where mis the network ALD-2I loop, d is the subaddress of the smoke detector, and x is the desired sensitivity setting using number or letter) is honored for users accustomed to XL3 commands.]

CIP m-d x – Change (Arm/disarm) Input Point (CO)

Use the CIP command to arm or disarm an input device from the VDT. At the command prompt, type CIP, space, the module-device number, space, and the letter that represents the desired arm/disarm state of the input. Press ENTER.

The lower case lefters represent the following:
m The ALD-2Is loop network address of the input to be armed/disarmed.
d The loop subaddress of the input to be armed/disarmed.
x The desired arm/disarm state of the input.
A – Arm input
D – Disarm input

[Note that the XL3 command CO or COI m-d x (where m is the network ALD-2 loopd is the subaddress of the input point, and x is the desired armed/disarmed state) is honored for users accustomed to XL3 commands.]

COP m-d x y – Change Output Point (CO)

Use the COP command to manually control an output point from the VDT. At the command prompt, type COP, space, the module-device number, space, and the letters representing the desired arm/disarm and energize/de-energize state of the output. Press ENTER.

m The ALD-2I loop network address of the output to be changed.
d The loop subaddress of the output to be changed.
x The desired arm/disarm state of the output.
A – Arm output
D – Disarm output

y The desired energize/deeneraize state of the output.
E – Energize output
D – De-energize output

[Note that the XL3 command CO or COO m-d x y (where mis the network ALD-2I loop, d is the subaddress of the output point, x is the desired armed/disarmed state, and y is the desired energized/de-energized state) is honored for users accustomed to XL3 commands.]

CAT – Control Air Sampling Alarm Trip Points

Use the CAT command to modify the Air Sampling alarm trip point values. At the command prompt type CAT, space, the NIM-1 (ASP) module number, space, the device number (d), space, the pre1 alarm trip level, space, the pre2 alarm trip level, space, and the alarm trip level. All trip level values should be from 0-9 with 0 indicating 100% scale. Press ENTER. The new Air Sampling alarm trip points are now in effect.

CFT – Control Air Sampling Airflow Trip Points

Use the CFT command to modify the Air Sampling airflow trip point values. At the command prompt type CFT, space, the NIM-1 (ASP) module number, space, the device number (d), space, the low airflow trip level, space, and the high airflow trip level. All trip level values should be from 0-9 with 0 indicating 100% scale. Press ENTER. The new Air Sampling air flow trouble trip points are now in effect.

CPS m-d x.x – Control Percent/Ft Sensitivity

Use the CPS command to change the percent/ft sensitivity of the selected module. At the command prompt type CPS, space, the moduledevice number, space, and the desired sensitivity %/ft settings. Press ENTER. The new percent/ft sensitivity settings are now in effect.

CPP m-d x.x – Control Percent/Ft Pre-Alarm

Use the CPP command to change the percent/ft pre-alarm settings of the selected module. At the command prompt type CPP, space, the moduledevice number, space, and the desired %/ft prealarm settings. Press ENTER. The new percent/ft pre-alarm settings are now in effect.

CAP m-d apps – Control ASD Application

Use the CAP command to change the ASD application of the selected device. At the command prompt type CAP, space, the module-device number, space, and the desired ASD application (apps). Refer to Table 1 for a listing of ASD applications and abbreviations. Press ENTER. The new percent/ft pre-alarm settings are now in effect.

NOTE: If the ASD application is changed while Test ASD is on, the changes will not be effective until Test ASD is turned off.

TABLE 1 ASD SUBMENU ABBREVIATIONS		
VDT Abbrev. (ASD apps)	**Application**	**Description**
N	Disable	No Applications (Standard Photoelectric Detector)
0	Office (Retail)	Reasonably clean, climate controlled atmosphere
W	Warehouse (Light Manufacturing)	Airborne dust, equipment, fork truck and light to m edium dock area exhaust fumes
L	Lobby (Atrium)	Relatively dean area. temperature changes, cellular phones, smoking
C	Computer Room	Very controlled environment, dean. temperature cl osely regulated, high cost clean machinery operati ng, no smoking, high air velocity
D	Dormitory	Airborne dust and temperature changes, living qua rters, cooking fumes, smoking
H	Healthcare	Higher level risk, relatively dean, electronic equipment
P	Parking Garage	Airborne dust. car and diesel fumes, temperature s wings
U	Utility (Transformer) Room	Normal to somewhat dirty environment. heat from running equipment
S	Precious Storage (Sensitive Envi ronment)	Sensitive materials or equipment storage, dean du st-free environment, earliest warning desired
T	Hostile Environment	Dirty, dusty, humid, operating equipment. RF prese nt, wide temperature swings
K	Duct (Open air or duct housing)	Dirty, dusty, humid, wide temperature swings. high air velocity

Using the TEST Command from the VDT
CTD hh:mm:ss nn-dd-yyyy – Change Time (CT)
The CTD command, followed by the time and date typed in the format described, changes the time and date in the MXL. The command is executed when ENTER is pressed. Type the command as indicated above, making sure to include spaces, colons, and hyphens.

The lower case letters represent the following:
hh — The hour, in a 24 hour format, to which the MXL is set when the command is executed.
mm The minute to which the MXL is set when the command is executed.
Ss The second to which the MXL is set when the command is executed.
nn The month to which the MXL is set when the command is executed.
dd The day to which the MXL is set when the command is executed.
yyyy The year to which the MXL is set when the command is executed.

NOTE: The following items MUST be included:

1. The spaces between the command/time and time/date strings.
2. The colons in the time string.

3. The hyphens in the date string.

PWR m – Power Report

Use the PWR command for a report of power supply data for the MMB or a PSR-1. At the command prompt, type PWR, space, and the module number of the power supply for which the report is needed. Press ENTER.

HST History Log Status

Use the HST command for a summary of history log data. This data includes the history log start date, the number of events logged, the history log type, and the percent of history log used.

HAL hh:mm:ss mm-dd-yyyy – Alarm History

Use the HAL command for a list of the alarms recorded since the date shown in the command line. If the date parameter is omitted, the history log start date is used.

HSP hh:mm:ss mm-dd-yyy – Supervisory History

Use the HSP command for a list of the supervisories recorded since the date shown in the command line. If the date parameter is omitted, the history log start date is used.

HTR hh:mm:ss mm-dd-yyy – Trouble History

Use the HTR command for a list of the troubles recorded since the date shown in the command line. If the date parameter is omitted, the history log start date is used.

HSC hh:mm:ss mm-dd-yyyy – Security History

Use the HSC command for a list of the securities recorded since the date shown in the command line. If the date parameter is omitted, the history log start date is used.

HAE hh:mm:ss mm-dd-yyyy – All Event History

Use the HAE command for a list of all events recorded since the date shown in the command line. If the date parameter is omitted, the history log start date is used.

LMP – Annunciator Lamp Test

Enter the LMP command to perform a lamp test on the annunciator. The MKB lamp tests in the same way it would for the corresponding menu function.

LCD – Annunciator Display Test

Enter the LCD command to perform an LCD display test on the annunciator. The MKB tests in the same way it would for the corresponding menu function.

DEV m-d x – Device LED

Use the DEV command to turn on a device (detector) LED. Type the DEV command, space, the full device address (module-device) and the desired state, x, of the LED (use E or D). Press ENTER.

m The ALD-21 loop network address of the detector LED to be changed.

d The loop subaddress of the detector LED to be changed.

x The desired energized/deenergized state of the LED.

E – Energize LED (or LED on)

D – De-energize LED (or LED off)

MLT m – MOI Lamp Test

Use the MLT command to perform a lamp test on MOD-16 outputs of an MOI module. Type the MLT command, space, and the network address of the MOI to be lamp tested. Press ENTER. The MOI lamp tests as it would for the corresponding menu item.

XLT m – XLD-1 Point Annunciator (PAX) Lamp Test

Use the XLT command to perform a lamp test on a PAX output on a XLD-1 loop. Type the XLT command, space, and the network address of the XLD-1 loop containing the PAX to be lamp tested. Press ENTER. The PAX lamp tests in the same way it would for the corresponding menu item.

PRE m-d – Test Pre-Alarm

Use the PRE command to test pre-alarm logic. At the command prompt type PRE, space, and the module-device number. Press ENTER. The detector is sent its current analog2 reading as a pre-alarm threshold so that the detector will prealarm.

ASD – Test ASD Devcies

Use the ASD command to test ASD detectors. At the command prompt type ASD. Press ENTER. The ASD testing is enabled and a Trouble In is posted in the System. Typing ASD a second time will toggle the test, disabling the testing and posting a Trouble Out.

NOTES:

1. When toggling between Testing Enabled and Testing Disabled, there is a three minute time period that separates the two states.
2. If Test ASD is actived and left alone, the system will automatically disable the test (time out) after four hours.

SCM – Set Commissioning Mode for Module

Use the SCM command to set a particular module in commissioning mode. At the command prompt type SCM, space, the module number, space, ON (or OFF). Press ENTER. Type ON to activate the commissioning mode or OFF to deactivate it. For example: Enter MXL command: SCM 1 ON

Module 1 will then be put into commissioning mode. If the module is not in system, then an error message will be printed out:
Enter MXL command: SCM 266 OFF Invalid Module

CMC – Commissioning Mode Control

Use this command to activate/deactivate the commissioning mode globally. Modules that are commissioned individually stay inactive until commissioning mode is turned on globally. At the command prompt type CMC. Press ENTER.
Issuing the command CMC twice toggles the system commissioning mode on and off as shown the example below:
Enter MXL command: CMC TROUBLE IN 253 15:04:17 Feb 17, 1997-CERBERUS
Pyrotronics-
System Commissioning Mode, MXL Panel Enter MXL command: CMC
TROUBLE OUT 253 15:04:25 Feb 17, 1997-CERBERUS
Pyrotronics-
System Commissioning Mode, MXL Panel

HOF – History Logging Off

Use the HOF command to manually turn off History logging. At the command prompt type HOF. Press ENTER. MXL History logging is now temporarily disabled.
In order to access this feature, the History Option must be enabled in the CSG-M and downloaded to the MXL. A password is required for the HOF command.
History turned on or off using the MKB menu or VDT is unaffected through PANEL RESET, and defaults to the setting in CSG-M upon power-up.

HON – History Logging On

Use the HON command to manually turn on History logging. At the command prompt type HON. Press ENTER. MXL History logging is now enabled (if previously turned off). In order to access this feature, the History Option must be enabled in the CSG-M and downloaded to the MXL. A password is required for the HON command.
History turned on or off using the MKB menu or VDT is unaffected through PANEL RESET, and defaults to the setting in CSG-M upon power-up.

HAR – Arm/Disarm (Enable/ Disable) History Erasure

Use the HAR command to manually arm/disarm (enable/disable) History log erasure. At the command prompt type HAR. Press ENTER. The HAR command must be enabled before History log erasure can be made using the HER command. In order to access this feature, the History Option must be enabled in the CSG-M and downloaded to the MXL. A password is required for the HAR command.

HER – History Log Erase

Use the HER command to manually erase the History log. (The History Erase option must be enabled first via the MKB menu or HAR command at the VDT). At the command prompt type HER. Press ENTER.
In order to access this feature, the History Option must be enabled in the CSG-M and downloaded to the MXL. A password is required for the HER command.

MXL-VDT 80/132 SETUP

To enter the MXL-VDT setup menu, simultaneously press both the Shift and Select keys.
Use the following parameters in the setup menu when setting up the supervised MXL-VDT 80/132 terminal.

Note: To return to MXL-VDT default settings, depress D from the terminal setup menu.

GENERAL SETUP	
Characteristic	Setting
Emulation Enhancements Virtual Term Scroll Style Auto Scroll Auto Wrap Received Auto Page* Warning Bell Margin Bell Bell Sound Per Block Term Send ACK Monitor Mode	Wyse50+ Off Off Jump On On CR On On Off Preference (default 3-loud) US/CR Off

*To view other pages when the auto page setting is on, simultaneously press the Cntrl and Pg Up keys or the Cntrl and Pg Dn keys.

DISPLAY SETUP	
Characteristic	Setting
Columns 80/132 Clear Lines Pages Status Line Cursor Style Cursor Screen Saver Background Attributes Wprt Intensity Wprt Reverse Wprt Underline Refresh Pound Clear Auto Front Load	Per CSG-M (default 80) Off 24 1 x lines Ext Per preference (default steady block) Per preference (default on) Off Dark Page Normal Off Off 60 Hz US On

FUNCTION KEY SETUP
None required – Performed by MXL
TABS SETUP
None required
ANSWERBACK SETUP
Do NOT alter data in this menu.
Data is preset at factory.
Altering this data results in VDT supervision errors.

KEYBOARD SETUP	
Characteristic	**Setting**
Key Click	On
Key Repeat	Off
Key Lock	Caps
Return Key	CR
Enter Key	CR
Back Space Key	BS/DEL
Left Alt Key	Funct
Break	Off
Xmt Limit	None
Fkey Xmt Limit	None
Key Code	ASCII
Language	US

ANSI SETUP	
Characteristic	**Setting**
Fkey Lock	Off
Feature Lock	On
KeyPad	Numeric
Cursor Keys	Normal
Xfer Term	EOS
Char Mode	National
Keys	Typewriter
VT100 ID	VT100
Print	National
Send	All
Send Area	Screen
Print Area	Screen
Send Term	None
Print Term	None
Print Mode	Normal
Auto Answerbk	On

COMMUNICATION SETUP	
Characteristic	**Setting**
Main Baud Rate	Per CSG-M (default 1200 baud)
Main Data/Parity	Per CSG-M (default 8 data bits/no parity)
Main Stop Bits	Per CSG-M (default 1 stop bit)
Ignore 8th Bit	On
Main Rcv Hndsk	None
Main Xmt Hndsk	None
Comm Mode	Full Duplex
Disconnect	2 seconds

Use the following minimum cabling requirements when connecting a supervised interactive terminal to an MXL System.

PIM-1 to MXL-VDT (80-132)

Minimum Cabling Requirements

FROM PIM-1		TO MXL-VDT(80-132)	
Terminal No.	Signal	Pin no.	Signal
4	RxD	2	TxD
5	TxD	3	RxD
2	SigGnd	7	SigGnd

PIM-1 to TI-820KSR
Minimum Cabling Requirements

FROM PIM-1		TO MXL-VDT(80-132)	
Pin No.	Signal	Pin No.	Signal
4	RxD	2	TxD
5	TxD	3	RxD
2	SigGnd	7	SigGnd
3	Printer Busy	11	SCA

MXL-VDT 80/132 SETUP USING EITHER THE AUXILIARY OR PARALLEL PORT
Use the following settings in the setup menu when installing an unsupervised VDT with an unsupervised printer. The settings are given for several printers.
NOTE: The CSG-M selection for the termi-nal for all three printers listed below must be either VDT-80 or VDT-132 (unsupervised).
When installing a parallel printer, use a standard DB-25 (male) to Centronix printer cable.

GENERAL SETUP		Setting	
Characteristic	Texas Inst TI-820KSR	C. Itoh CI-2500	Generic Parallel Printer
Emulation	Wyse 50+	Wyse 50&	Wyse 50+
Enhancements	Off	Off	Off
Virtual Term	Off	Off	Off
Scroll Style	Jump	Jump	Jump
Auto Scroll	On	On	On
Auto Wrap	Off	Off	Off
Received	CR	CR	CR
Auto Page*	Off	Off	Off
Warning Bell	On	On	On
Margin Bell	Off	Off	Off
Bell Sound	1	1	1
Block Term	US/CR	US/CR	US/CR
Send ACK	Off	On	On
Monitor Mode	Off	Off	Off

To view other pages when the auto page setting is on, simultaneously press the Cntrl and Pg Up keys or the Cntrl and Pg Dn keys.

COMMUNICATION SETUP			
Characteristic	Setting		
	Texas Inst 71-820KSR	C. Itoh CI-2500	Generic Parallel Printer
Main Baud Rate	Per CSG-M	Per CSG-M	Per CSG-M
Main Data/Parity	Per CSG-M	Per CSG-M	Per CSG-M
Main Stop Bits	Per CSG-M	Per CSG-M	Per CSG-M
Ignore 8th Bit	On	On	On
Main Rcv Hndsk	None	None	None
Main Xmt Hndsk	None	None	None
Comm Mode	Full Duplex	Full Duplex	Full Duplex
Disconnect	2 seconds	2 seconds	2 seconds
Aux Baud	**	**	**
Aux Data/Parity	Per CSG-M	as desired	**
Aux Stop Bits	Per CSG-M	as desired	**
Aux Rcv Hndsk	None	DTR/XOff	DTR/XOff
Aux Xmt Hndsk	None	XONXOff	None
Aux Port	RS232	RS232/422	RS232/422
Aux Interface	RS232	RS422	RS433
Printer	Serial	Serial	Parallel

* For best results, set the auxiliary port baud rate higher than the main baud rate.

** Setting doesn't matter when using parallel printer.

DISPLAY SETUP			
Characteristic	Setting		
	Texas Inst 71-820KSR	C. Itoh CI-2500	Generic Parallel Printer
Columns 80/132 Clear Lines Pages Status Line Cursor Style Cursor Screen Saver Background Attributes Wprt Intensity Wprt Reverse Wprt Underline Refresh Pound Char Auto Font Load	Per CSG-M Off Per preference 1 x lines Off Per preference On Off Dark Page Normal Off Off 60 Hz US On	80 Off 24 1 x lines Off Per preference On Off Dark Page Normal Off Off 60 Hz US On	Per CSG-M Off Per preference 1 x lines Off Per preference On Off Dark Page Normal Off Off 60 Hz US On

KEYBOARD SETUP

Characteristic	Setting		
	Texas Inst TI-820KSR	C. Itoh CI-2500	Generic Parallel Printer
Key Click	Off	Off	Off
Key Repeat	Off	Off	Off
Key Lock	Caps	Caps	Caps
Return Key	CR	CR	CR
Enter Key	CR	CR	CR
Back Space Key	BS/DEL	BS/DEL	BS/DEL
Left Alt Key	Funct	Funct	Funct
Break	Off	Off	Off
Xmt Limit	None	None	None
Fkey Xmt Limit	None	None	None
Key Code	ASCII	ASCII	ASCII
Language	US	US	US

ANSI SETUP

Characteristic	Setting		
	Texas Inst TI-820KSR	C. Itoh CI-2500	Generic Parallel Printer
Fkey Lock	Off	On	On
Feature Lock	On	On	On
KeyPad	Numeric	Numeric	Numeric
Xfer Term	EOS	EOS	EOS
Cursor Keys	Normal	Normal	Normal
Char Mode	National	National	National
Keys	Typewriter	Typewriter	Typewriter
VT100 ID	VT-100	VT-100	VT-100
Print	National	National	National
Send	All	All	All
Send Area	Scroll Rgn	Scroll Rgn	Scroll Rgn
Print Area	Scroll Rgn	Scroll Rgn	Scroll Rgn
Send Term	None	None	None
Print Term	None	None	None
Print Mode	Bidirectional	Auto	Auto
Auto Answerbk	On	On	On

FUNCTION KEY SETUP
None required – Performed by MXL
TABS SETUP
None required
ANSWERBACK SETUP
Do NOT alter data in this menu. Data is preset at factory. Altering this data results in VDT supervision errors.
CABLING REQUIREMENTS FOR AUXILIARY PORT TO PRINTER

LINK TERMINAL (Aux port) pinouts DB-9 cable	C. ITOH CI-2500 pinouts DB-25 cable	TI-820KSR pinouts DB-25 cable
2 RXD 1 DCD 3 TXD 4 DTR 5 GND 6 DSR 7 RTS 8 CTS	2 Send Data 3 Receive Data 7 Signal Ground 11 Restraint	8 Received line signal data 2 TXD 3 RXD 6 DSR 7 GND 20 DTR 5 CTS 4 RTS

RECOMMENDED PRINTER SETTINGS
Use the following factory tested settings for an unsupervised C. Itoh CI-2500 or Texas Instruments TI-820KSR printer used with an unsu-pervised VDT. (Refer to the corresponding printer operation manual for further

information.)

C. ITOH CI-2500 PRINTER	
Function No.	Menu No. Status
00 MODE	02 L (DEC EMULATION)
07 PRINTER ID	04 LEVEL 1
11 BUFFER	02 NORMAL
13 PW ON	01 ON LINE
14 DIRECTION	03 UNI-DIR
15 WRAPAROUND	02 WRAP
17 AUTO CR	01 CR + LF
22 AUTO LF	02 CR + LF
23 CAN	01 NORMAL
32 GL, GO	01 US ASCII
35 G3	01 US ASCII
41 RAM AREA	01 DATA BUF
81 OFF-LINE STATE	01 ALL RECEIVE
82 DSR	02 INVALID
83 RTS TIMING	02 BSY SYNC
84 CD	02 INVALID
85 CTS	02 INVALID
91 OVER RUN	01 20
92 DATA BIT	02 TO AGREE WITH TERMINAL AUX
93 PROTOCOL	02 RDY/BSY2
94 STOP BIT	01 TO AGREE WITH TERMINAL AUX
95 PARITY	01 TO AGREE WITH TERMINAL AUX
96 BPS	01 TO AGREE WITH TERMINAL AUX

TEXAS INSTRUMENTS TI-820KSR PRINTER	
Printer Settings (See Manual)	Print Configuration (Typical)
10	# characters per inch (16.5 CPI)
8	Line spacing (8 = single space 8 LPI)
088	Bottom margin line number (001-112)
001	Top margin line number (001-112)
132	Right margin column number (001-218)
001	Left margin column number (001-218)
008	Form length in lines (001-112)

TEXAS INSTRUMENTS TI-820KSR PRINTER

Printer Settings (See Manual)	Communication Settings (Recommended)
83	Transmit DC3 or Break on Printer Busy, DC1 on ready
81	Enable recognition of device and format control commands from communication line. (DFC option required.)
	Transmit space parity, reverse parity checkoff. Set to agree with terminal auxiliary port settings.
	Baud rate. Set to agree with terminal auxiliary port settings.
14	Full duplex reverse channel off ready (console mode.)

MXL-VDT QUICK REFERENCE GUIDE

To display the following guide on the VDT, or to print it out on a printer connected to the VDT, use either the HLP or Shift F1 command on the MXL-VDT.

ACKNOWLEDGEMENT AND AUDIBLE COMMANDS				
MXL Menu Item	MXL Command	XL3 Command	Programmed Function Key	MXL Rev. Effectivity
Acknowledge Alarm* Acknowledge Security* Acknowledge Supervisory* Acknowledge Trouble* Silence/Unsilence Audibles*	AAL ASC ASP ATR SUA	AA — — AT	Fl F5 F3 F4 F2	2.12 2.12 2.12 2.12 2.12

* Password level 1 or higher required to access this command.

ENTERING LIST COMMANDS FROM THE VDT				
MXL Menu Item	MXL Command	XL3 Command	Programmed Function Key	MXL Rev. Effectivity
List Alarms	LAL	LA	F7	2.12
List Analog (analog2) Voltage	LVA m	LDO m	Shift F6	2.12
List Device Type	LDT m	—	Shift F2	2.12
List Messages	LMS m	—	Shift F3	2.12
List Module Type	LSC	—	Shift F4	2.12
List Security	LSS m	—	F10	2.12
List Sensitivity Settings	LSV m	—	Shift F5	2.12
List Sensitivity Voltages	LSW	LF m	Shift F7	2.12
List Software Version	LSP	—	—	2.12
List Status	LTV m	LS	F6	2.12
List Supervisory	LTR	—	F8	2.12
List Threshold Voltage	LCV m	—	Shift F8	2.12
List Trouble	LIV m	LT	F9	2.12
List Calibration Voltage	L2V m	LD 2	—	6.04
List ID Voltage	LKP m	LD 3	—	6.04
List 2nd ID Voltage	LAP m	LD 1	—	6.04
List Smoke Percent Scale	LAT m	—	—	6.06
List Airflow Percent Scale	LFT m	—	—	6.06
List Alarm Trip Points	LPS m	—	—	6.06
List Airflow Trip Points	LPP m	—	—	6.06
List Percent/Ft Sensitivity	LPA m	—	—	7.00
List Percent/Ft Pre-alarm	LAT m	—	—	7.00
List Percent/Ft Analog	LPA m	—	—	7.00
List ASD Apps	LPA m	—	—	8.00
List Disarmed Output State	LOD m	—	—	9.00
List Disarmed Input State	LID m	—	—	9.00
List Modules in Commissioning Mode	LCM	—	—	9.00

TDVEHTMORFSDNAMMOCLORTNOCGNIRETNE

MXL Menu Item	MXL Command	XL3 Command	Programmed Function Key	MXL Rev. Effectivity
Charge (AmVdisarm) hpul Point' m = module nunter a = subaddress of input point x = A-arm. D-disarm	CP m-d x	CO or COI m-d x	Shift F9	2.
Change Output Point' m . module number a = sibaddress of input point x = A-arm. D-disarm y = E-energize output, D-de-energize o utput	COP m-d x y	CO or COO m-d x y	Shift F10	2.
Charge Sensitivity' m = module number a = smoke detector subaddress x = desired sensitivity setting MXL Revisions before 3.0: L-Low. M-Medium. N-Normal. H-High MXL Revisions 3.0 and higher for ALD-21 smoke detectors: 0-Low3. 1-Low2. 2-Low3. 3-Normal. 4-Hi_1. 5-Hi_2. 6-Hi_3 MXL Revisions 6.04 and higher for XLD -1 smoke detectors: 2-Low1. 3-Normal, 4-Hi_1. 5-Hi_2	CSS m-d x	CS m-d x	Shift F12	2.12 3.00 6.04
Log Off (cancel arrent password)	LOF	—	Shift F11	2.
Log On (enter password)	LON	—	F11	2.
Reset the MXL'	CRS	CR	F12	2.

Control Alarm Trip Points CAT m-d p1 p2 aim m = module number a = device number p1 = PreAlarm 1 trip point (0-9, 1=10% scale, 0=100% scale) p2 = PreAlarm 2 trip point (0-9, 1.10% scale, 0.100% scale) ai m = Alarm 1 trip point (0-9, 1.10% scale, 0=100% scale) Note: p1 <= p2 <=alm	—	—	6.
Control Airflow Trip Points CFT m-d lo hi m = module number a = device number lo = Low Airflow Trouble trip point (0-9, 1=10% scale. 0=100% scale) hi = High Airflow Trotble trip point (0-9, 1=10% scale, 0= 100% scale) Note: hi-lo > 1	—	—	6.

MXL Menu Item	MXL Command	XL3 Command	Programmed Function Key	MXL Rev. Effectivity
Control Percent/Ft Sensitivity in = module number d = subaddress of smoke detector x.x = desired sensitivity %/ft setting: .5 – 4.0 %/ft — Photo; .6 – 1.7 %/ft — Ion	CPS m-d x.x			7.00
Control Percent/Ft Pre-alarm m = module number d = subaddress of smoke detector x.x = desired sensitivity %/ft setting: .2 – 2.0 %/ft — Photo: .2 – 0.7 %/ft –Ion	CPP m-d x.x			7.00
Control Change Apps m = module number d = device number apps = abbreviation of ASD application (Refer to Table 1. page 7, for applications a bbreviations)	CAP m-d apps	—		8.00

* Password level 1 or higher required to access this command.

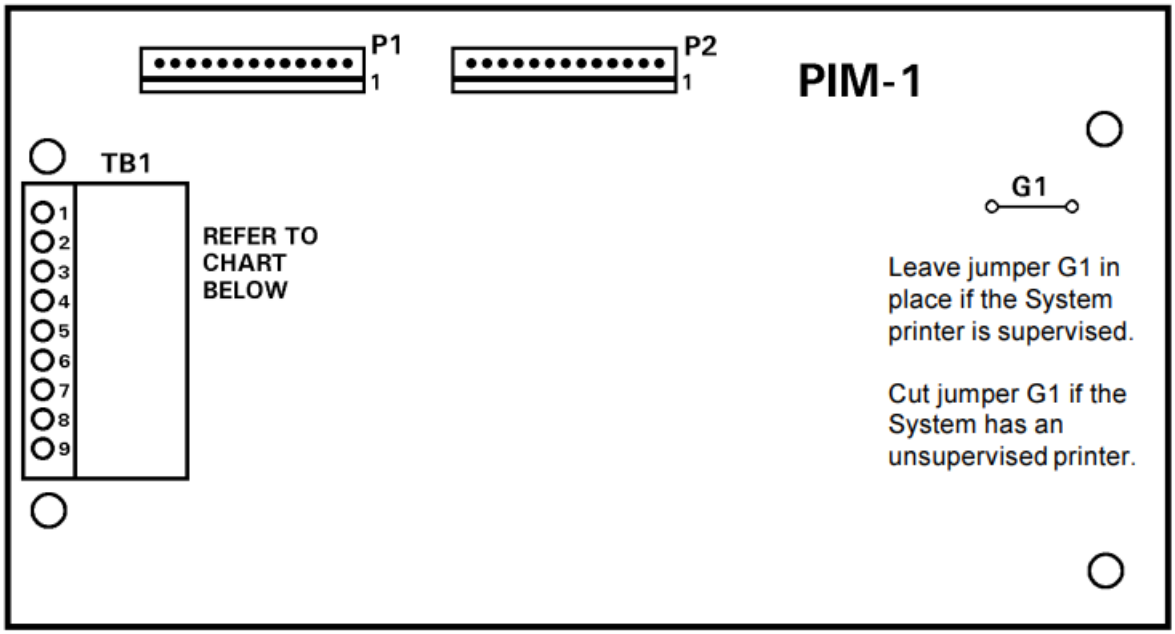
SETTING THE TIME FROM THE VDT			
MXL Menu Item	MXL Command	XL3 Command	MXL Rev. Effectivity
Change Time It = 2-digit number of hours (24 hour f ormat) mm = 2-digit number of minutes ss = 2-digit number of seconds m = 2-digit month of the year dd = 2-digit day of the month yyyy = 4 digits of the year	CTD hh:mm:ss nn-dd-yyyy	CT hh:mm:ss nn-dd-yyyy	2.12

* Password level 2 or higher required to access this command.

ENTERING TEST COMMANDS FROM THE VDT		
MXL Test Menu Items	**MXL Command**	**MXL Rev. Effectivity**
Device LED Control— m . module number d = subaddress device LED x = E-energize LED, D-de-energize LED	DEV m-d x	2.
Lamp Test of MKB-2—	LMP	2.
M01-1 Lamp Test” m = MOI module number	MLT m	2.
Power Report— m = PSR-1 or MMB module number	PWR m	2.
Test LCD display on MKB-2″	LCD	2.
MXL Revisions 3.0 and higher History Status Alarm History Si.penAsory History Trouble History Security History All Event History hh = start hour mm = start minute ss = start seconds mm = start month dd = start day yyyy = start year	HST HAL hh:mm:ss:mm-dd-yyyy HSP hh:mm:ss:mm-dd-wyy HTR hh:mm:ss:mm-dd-yyyy HSC hh:mm:ss:mm-dd-my HAE hh:mm:ss:mm-dd-ym	3.0
XLD-1 PAX Lamp Test	XLT m	6.
Test Pre-Alarm m = module number d = subaddress of smoke detector	PRE m-d	7.0
Test ASD Devices	ASD	8.0

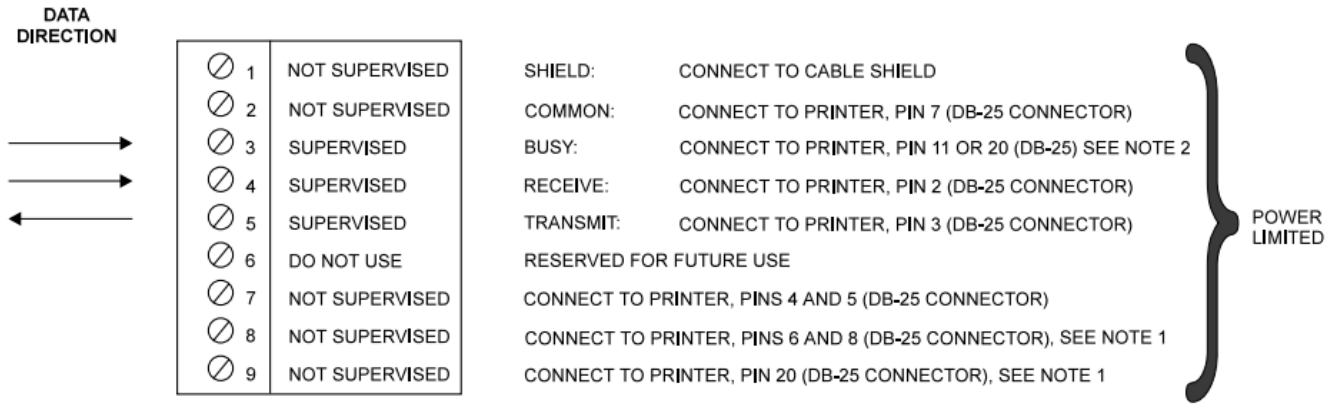
Set Commissioning Mode for Module m = module number ON = activates commissioning mode OFF = deactivates commissioning mode	SCM m (ON/OFF)	9.0
Commissioning Mode Control	CMC	9.0
History Manually Turned Off History Manu ally Turned On History Manually Armed/Di sarmed History Manually Erased	HOF HON HAR HER	10.0

**Password level 2 or higher required to access this command.
NOTE: The function keys are programmed into the MXL-VDT terminal at system power-up.



TB1 CONNECTIONS

CAUTION: This table refers to whether or not the wiring connections are supervised The table does not refer to the type of printer used in the System.

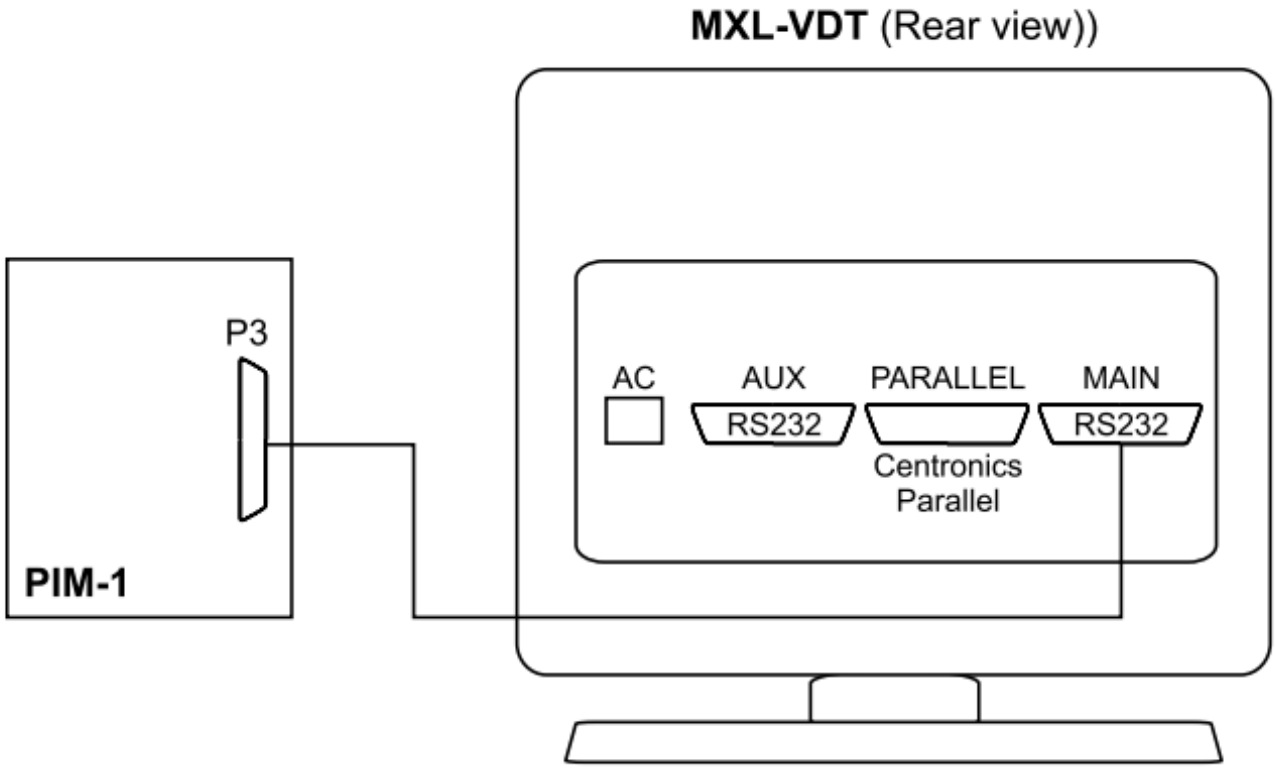


NOTES:

1. Terminals TB1-8 and 9 are connected together on the PIM-1.

2. The busy signal from the printer prevents the loss of characters if the printer falls behind. Refer to the printer manual for the proper pin [usually 11 (TB1-3) or 20 (TB1-9)J.

Figure 1 PIM-1 Connection Diagram



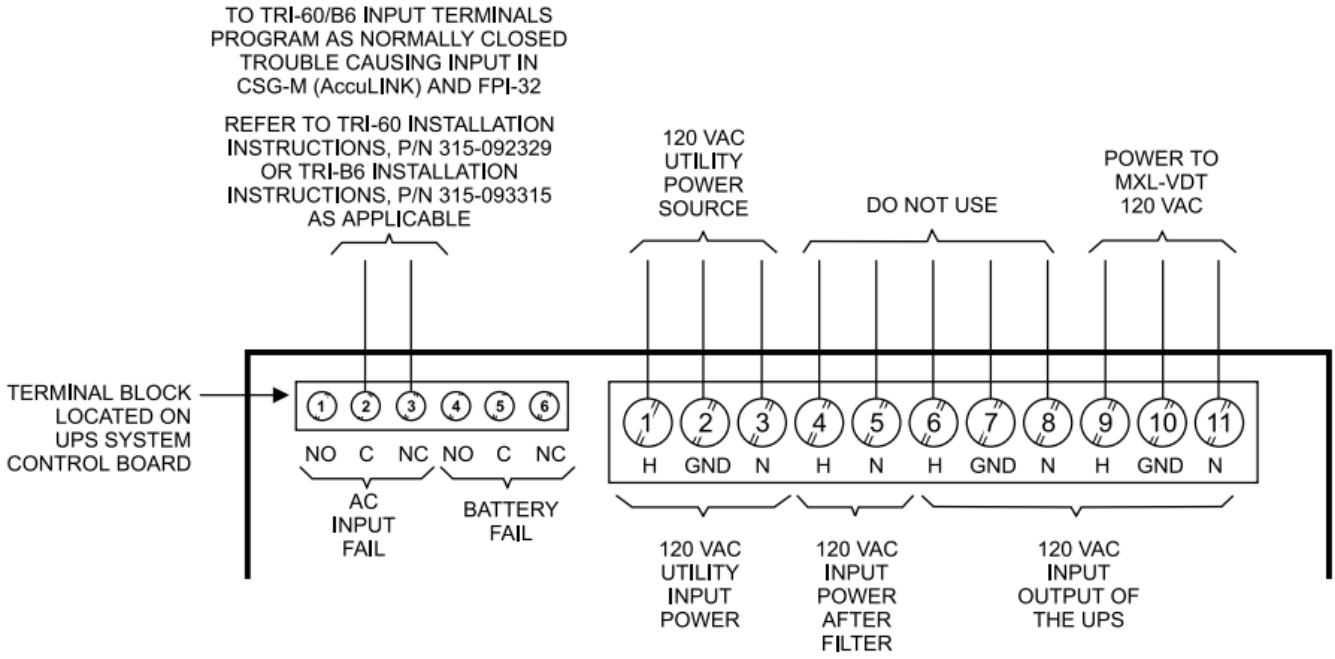
NOTES:

1. Refer to PIM-1 Installation Instructions. PM 315-091462, for the connection to MXL.
2. See PIM-1 to MXL-VDT Minimum Cabling Requirements table. page 11. for specific cabling requirements.
3. AC power connection is 110 VAC, 60Hz.
4. Maximum cable distance from PIM-1 (P3) to MXL-VDT is 25 feet. The modules and cable must be in the same room. 5. MXL-VDT auxiliary and parallel ports may be connected to UL-EDP listed printer which serves as an unsupervised ancillary device only.

Figure 2 MXL-VDT Installation Diagram

STANDBY POWER

The MXL-VDT requires a standby power source in the event of the loss of primary input power (AC mains.) Refer to Figure 3 below for the wiring diagram.



NOTES:

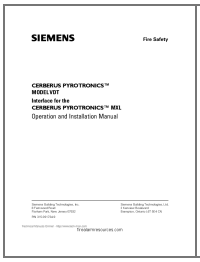
1. All wires 14 AWG min, 600V insulation.
2. Wiring to the printer and PIM-1 must be 14 AWG min, 600V insulation in conduit
3. Use the UPS ICS Lifeline Model 9300057.
4. Standby Power Requirements: 120 VAC. 0.6A for 24 hours.

Figure 3 MXL-VDT Standby Power Wiring Diagram

SIEMENS

Siemens Building Technologies, Inc.
8 Fernwood Road Florham
Park, New Jersey 07932
P/N 315-091734-9
Siemens Building Technologies, Ltd.
2 Kenview Boulevard Brampton
Ontario L6T 5E4 CN

Documents / Resources

	SIEMENS MXL VDT Interface Module Circuit Board [pdf] Instruction Manual MXL VDT Interface Module Circuit Board, MXL VDT, Interface Module Circuit Board, Module Circuit Board, Circuit Board